

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P962405

Luminaire Tested: **NAV-SB2C-727-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-727-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14617.5 lumens
Efficiency: N/A
Efficacy: 144.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

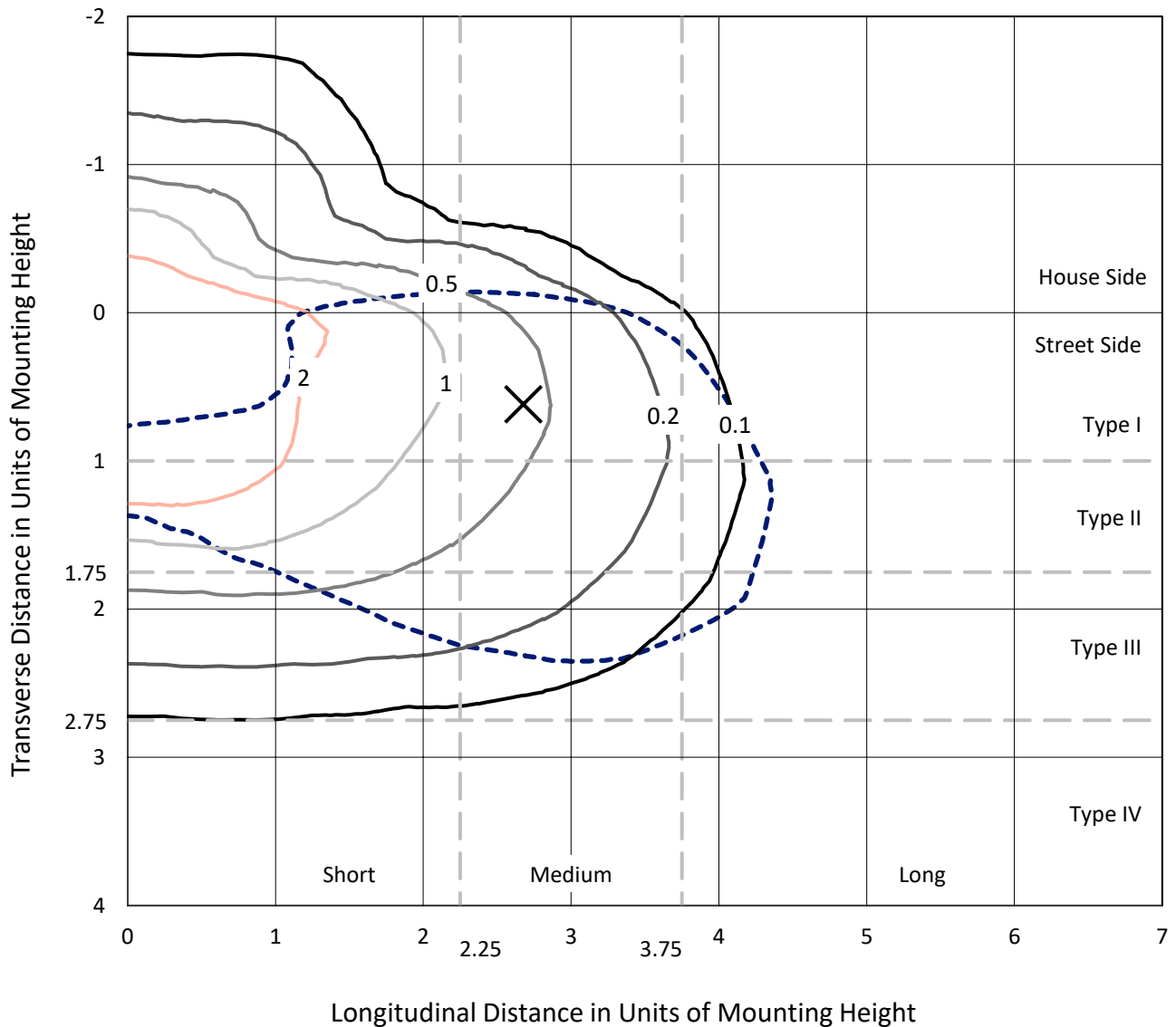
Input Watts (W): 100.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

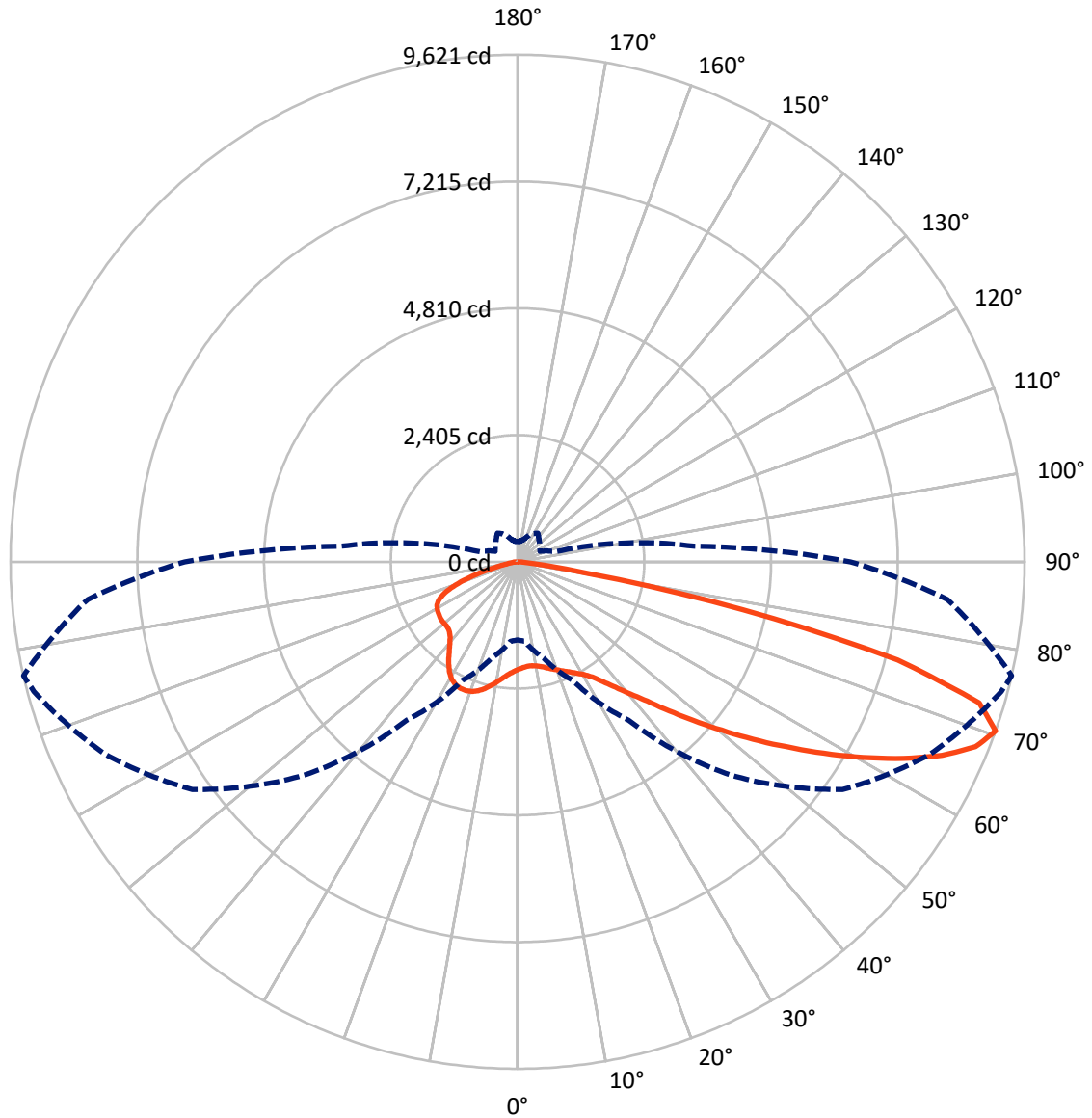
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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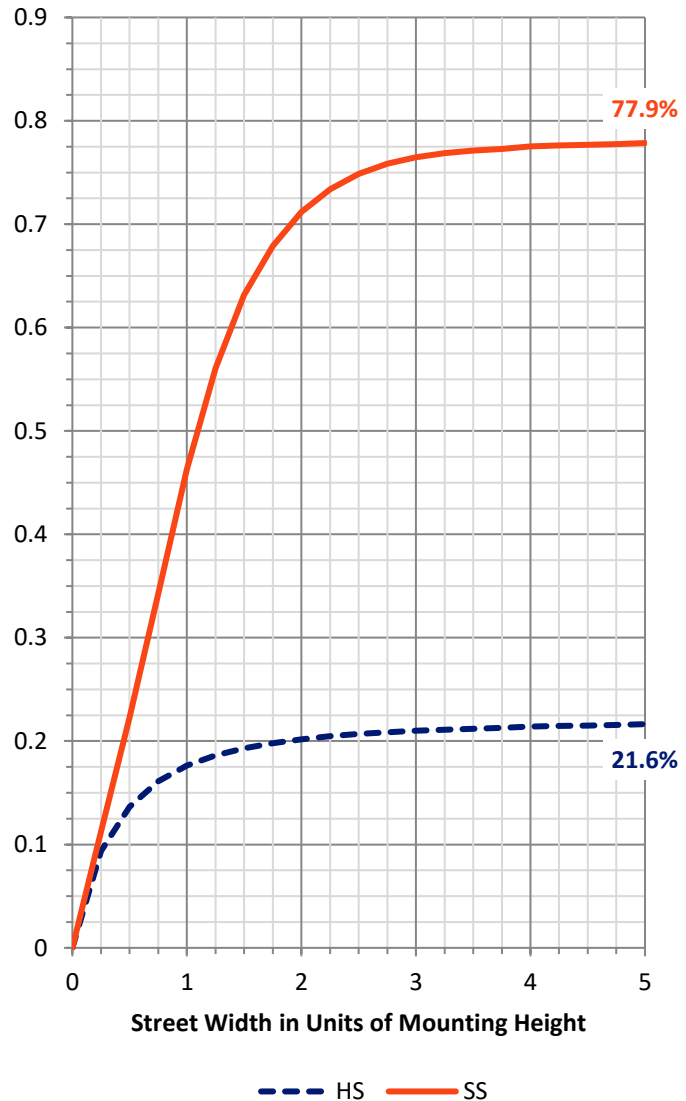
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3201.0	0.0	3201.0
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	11416.5	0.0	11416.5
	% Fixture	78.1	0.0	78.1
Total	Lumens	14617.5	0.0	14617.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.5	1.3
10°-20°	561.3	3.8
20°-30°	959.9	6.6
30°-40°	1543.7	10.6
40°-50°	2410.1	16.5
50°-60°	3219.3	22.0
60°-70°	3431.3	23.5
70°-80°	2112.3	14.5
80°-90°	185.1	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	14617.5	100.0
0°-180°	14617.5	100.0

Coefficient of Utilization

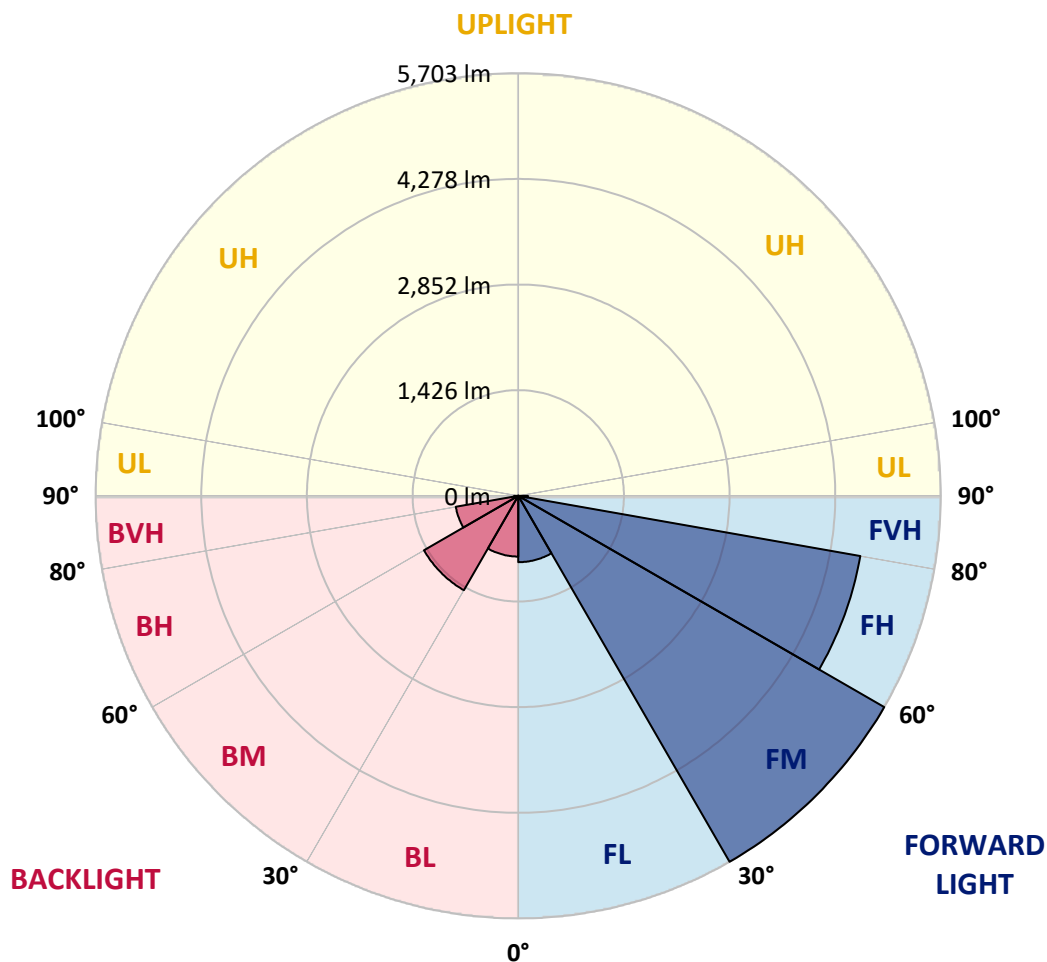


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	895.6	6.1			
FM (30°-60°)	5703.4	39.0			
FH (60°-80°)	4688.1	32.1			G2/5000
FVH (80°-90°)	129.4	0.9			G2/225
BL (0°-30°)	820.2	5.6	B2/1000		
BM (30°-60°)	1469.7	10.1	B2/2500		
BH (60°-80°)	855.5	5.9	B2/1000		G2/1000
BVH (80°-90°)	55.7	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
 Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2
2.5°	1879.8	1879.0	1888.8	1891.8	1909.8	1922.5	1946.5	1971.9	2004.8	2008.6	2028.8
5°	1771.3	1771.3	1782.5	1794.5	1817.6	1843.2	1879.8	1924.0	1980.9	1989.8	2040.1
7.5°	1679.2	1685.2	1694.9	1718.1	1745.1	1781.8	1837.9	1900.8	1975.7	1989.8	2070.7
10°	1605.0	1611.8	1623.8	1642.5	1682.9	1733.8	1807.2	1888.0	1988.4	2010.8	2115.6
12.5°	1581.9	1588.6	1595.3	1609.6	1647.0	1706.9	1794.5	1894.0	2019.0	2041.5	2177.0
15°	1635.8	1644.0	1638.8	1635.0	1654.5	1709.1	1800.5	1915.7	2057.3	2089.5	2252.6
17.5°	1760.0	1763.0	1751.0	1715.8	1712.9	1742.1	1828.9	1945.7	2105.1	2140.3	2329.0
20°	1960.7	1955.4	1930.7	1861.1	1821.4	1815.5	1877.6	1990.7	2154.5	2192.0	2411.3
22.5°	2233.2	2227.2	2177.8	2067.7	1979.4	1921.0	1947.9	2049.0	2210.0	2251.9	2491.5
25°	2573.1	2564.9	2492.2	2342.4	2205.5	2061.0	2043.7	2126.2	2278.1	2317.0	2575.3
27.5°	2969.8	2963.1	2884.5	2686.8	2489.2	2252.6	2162.9	2216.7	2349.2	2393.4	2669.6
30°	3396.5	3416.0	3276.7	3064.1	2814.1	2502.6	2323.1	2328.3	2441.3	2481.0	2784.2
32.5°	3898.2	3931.8	3764.1	3494.6	3153.2	2774.5	2525.2	2484.0	2575.3	2608.2	2928.6
35°	4395.2	4433.4	4294.1	3996.2	3603.2	3094.9	2736.2	2662.8	2753.5	2789.4	3120.3
37.5°	4825.0	4875.8	4804.0	4545.0	4084.5	3481.1	3011.8	2873.3	2972.8	3017.7	3377.8
40°	5164.1	5242.0	5236.7	5075.0	4652.0	3949.8	3361.4	3133.0	3245.4	3293.9	3690.0
42.5°	5439.6	5506.9	5565.3	5557.1	5244.2	4482.1	3772.4	3470.6	3556.0	3612.2	4041.2
45°	5629.7	5701.6	5827.3	5962.8	5813.9	5051.8	4243.3	3871.2	3949.0	4033.7	4459.6
47.5°	5799.7	5881.2	6044.4	6259.4	6297.5	5623.8	4759.1	4337.6	4408.7	4496.3	4879.6
50°	5814.6	5885.0	6138.0	6442.7	6641.2	6173.3	5313.1	4860.9	4927.5	5021.1	5329.5
52.5°	5453.0	5563.8	6005.6	6437.5	6799.1	6632.9	5863.3	5405.1	5480.0	5592.3	5795.1
55°	4232.7	4395.2	5617.0	6236.8	6743.0	6930.1	6386.6	5983.8	6079.7	6197.2	6263.8
57.5°	3645.8	3717.0	4458.9	5871.5	6486.9	7007.2	6828.2	6568.5	6722.8	6851.5	6759.4
60°	3276.7	3335.9	3774.6	5303.3	6150.0	6885.2	7169.7	7113.5	7380.0	7533.5	7266.2
62.5°	2881.5	2937.6	3336.7	4428.2	5718.8	6682.3	7385.2	7616.6	8053.8	8221.5	7743.9
65°	2489.2	2537.1	2919.7	3720.7	5170.8	6479.4	7496.8	8051.6	8677.4	8851.1	8140.7
67.5°	2052.0	2091.7	2453.2	3139.1	4504.6	6201.7	7552.2	8393.7	9220.2	9369.1	8336.7
70°	1480.8	1511.5	1885.1	2482.4	3668.3	5724.0	7529.8	8636.2	9501.6	9620.6	8188.5
72.5°	700.0	727.6	1166.3	1611.8	2591.0	4794.2	7075.4	8443.8	9215.7	9156.5	7281.2
75°	373.6	397.5	670.0	884.2	1368.5	3286.5	5789.9	7273.7	7738.6	7451.1	5381.1
77.5°	253.1	271.7	414.7	530.7	625.1	1560.2	3721.5	5036.0	4845.2	4370.5	2695.0
80°	200.6	220.1	339.9	359.4	302.5	563.8	1537.7	2331.3	1674.6	1339.3	766.6
82.5°	154.3	175.9	286.0	260.6	164.7	231.3	447.7	737.4	429.0	326.4	185.6
85°	94.3	117.6	224.6	166.2	92.9	105.6	152.0	205.1	131.0	109.3	66.6
87.5°	47.9	67.3	113.8	60.7	41.9	24.7	40.4	40.4	34.4	29.9	17.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2	2039.2
2.5°	2046.7	2061.8	2087.2	2111.2	2129.8	2147.8	2165.8	2175.6	2178.5	2190.5	2197.2
5°	2070.7	2098.4	2147.8	2194.2	2223.4	2241.4	2254.2	2261.7	2263.1	2266.9	2272.8
7.5°	2114.9	2159.1	2227.9	2274.4	2296.1	2294.6	2289.3	2270.6	2263.1	2256.3	2257.9
10°	2177.0	2235.4	2320.0	2352.2	2338.7	2302.8	2256.3	2201.7	2176.3	2151.6	2144.1
12.5°	2254.2	2328.3	2411.3	2409.9	2343.3	2251.1	2143.4	2059.5	2006.3	1968.2	1959.2
15°	2347.8	2433.0	2496.7	2445.8	2299.8	2134.4	1976.4	1867.1	1819.2	1777.2	1772.7
17.5°	2444.3	2535.6	2564.9	2434.6	2190.5	1961.4	1782.5	1696.4	1649.2	1626.8	1633.5
20°	2538.6	2629.2	2605.2	2370.2	2024.3	1765.3	1605.9	1558.6	1548.9	1554.2	1552.0
22.5°	2638.1	2719.0	2613.4	2245.9	1812.4	1564.7	1477.0	1478.6	1500.3	1516.0	1519.8
25°	2740.0	2794.7	2591.8	2066.2	1584.9	1417.2	1395.4	1419.4	1462.1	1492.8	1501.0
27.5°	2838.0	2862.0	2544.6	1843.9	1389.5	1311.6	1315.4	1364.8	1429.2	1471.8	1482.3
30°	2948.8	2922.0	2454.1	1593.9	1254.0	1221.0	1252.4	1310.2	1374.5	1412.7	1421.7
32.5°	3073.9	2973.5	2310.2	1362.5	1158.1	1148.4	1200.1	1237.5	1266.0	1277.1	1283.2
35°	3229.6	3046.2	2126.2	1200.1	1072.0	1095.2	1144.6	1126.0	1114.7	1108.7	1114.7
37.5°	3431.7	3144.3	1910.5	1094.5	1002.4	1057.1	1077.3	1018.8	974.7	953.0	958.3
40°	3675.0	3288.0	1703.1	1012.9	958.3	1024.2	988.9	918.6	862.4	831.7	833.9
42.5°	3945.3	3438.5	1528.7	951.5	933.6	997.2	923.8	840.0	749.4	739.6	749.4
45°	4229.0	3593.4	1409.7	904.4	921.6	974.0	886.4	750.9	686.5	726.2	747.1
47.5°	4512.8	3735.7	1337.8	869.2	915.5	947.8	853.4	701.5	655.8	713.4	740.4
50°	4828.7	3862.9	1305.6	843.7	908.9	937.3	804.0	688.7	623.6	661.8	690.2
52.5°	5142.3	3961.7	1281.7	818.3	899.1	929.1	780.1	673.7	584.7	586.9	602.7
55°	5455.3	4026.2	1255.4	784.5	877.4	911.1	777.9	657.3	555.4	545.0	552.5
57.5°	5789.2	4062.8	1223.2	747.1	840.0	865.4	775.6	644.6	546.5	529.3	531.6
60°	6129.1	4116.7	1181.3	701.5	789.8	810.8	770.4	640.1	541.3	512.1	514.3
62.5°	6433.7	4135.5	1131.2	658.0	725.4	756.9	759.1	636.3	527.1	476.8	476.8
65°	6633.6	4054.6	1043.6	608.6	655.8	701.5	737.4	623.6	501.6	451.4	451.4
67.5°	6625.4	3824.1	906.6	545.0	588.5	640.1	705.9	601.9	470.9	419.9	422.2
70°	6317.0	3368.9	732.9	470.9	514.3	574.2	665.5	569.7	434.2	385.5	390.0
72.5°	5417.8	2636.7	532.3	384.1	428.2	506.0	613.2	530.7	396.8	354.9	352.6
75°	3870.4	1668.7	360.8	295.0	333.1	429.0	548.0	485.1	362.3	356.4	336.1
77.5°	1977.1	797.2	238.8	215.6	232.1	338.4	460.4	433.5	367.6	294.2	262.0
80°	643.1	294.2	150.5	146.8	154.3	225.3	356.4	355.6	278.5	199.9	176.7
82.5°	205.1	126.5	98.1	94.3	90.6	141.4	248.6	281.5	187.9	126.5	125.8
85°	81.6	75.6	57.6	53.2	38.1	66.6	130.3	187.2	140.0	91.3	93.6
87.5°	29.9	29.9	15.7	11.3	8.2	22.4	35.2	56.2	80.2	47.2	46.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)